REPORT OF THE UTILITIES DEPARTMENT

OF

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 1999-001-E

CAROLINA POWER & LIGHT COMPANY

REPORT OF UTILITIES DEPARTMENT

SOUTH CAROLINA PUBLIC SERVICE COMMISSION

DOCKET NO. 1999-001-E

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INDEX OF FUEL REPORT

REPORT OF UTILITIES DEPARTMENT

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DOCKET NO. 1999-001-E

CAROLINA POWER & LIGHT COMPANY

REPORT OF FUEL ADJUSTMENT ANALYSIS

Scope of Examination

The Commission's Utilities Department Staff analyzed the Company's procedures and practices pertaining to its fuel operation. Staff's examination consisted of the following:

1) Review of the Company's monthly fuel reports including:
   - a) Power Plant Performance Data Reports
   - b) Major Unit Outage Reports
   - c) Generation Mix
   - d) Generation Statistics
   - e) Retail Comparison of MWH Sales
   - f) Retail Comparison of Fuel Costs

2) On-site inspection of the Company's coal quality sampling technique.

3) Review of the Company's currently approved Adjustment for Fuel Costs Rider.

4) History of Cumulative Recovery Account.

5) Calculation of fuel costs to be included in the base rates for April 1999 through March 2000.

REVIEW OF COMPANY'S MONTHLY FUEL REPORTS

The Company files with this Commission monthly reports that include power plant performance data, major unit outages, generation mix, and other reports that provide the Staff pertinent data on which to evaluate the Company's fuel operating expenses.

Selected information from the Power Plant Performance Data Reports for nuclear and fossil plants is shown on Exhibit No. 1. It includes a listing of capacity factors and equivalent availability factors for each unit by month for the period and also includes the yearly capacity factors (1996-1998) and the lifetime (cumulative) capacity factors. These factors are expressed as a

percentage. This percentage figure can be a useful index when attempting to locate or identify a particular problem or unusual occurrence.

Pursuant to S.C. Code Ann. Section 58-27-865 (Supp. 1998) certain criteria are established for review of a utility's effort to minimize fuel expenses. In evaluating a utility's fuel costs under this section, it is necessary to examine and determine whether the utility has made every reasonable effort to minimize fuel costs associated with the operation of its nuclear generation system while "giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities and minimization of the total cost of providing service."

The Nuclear Unit Outage Report considers each outage experienced by unit, giving the inclusive dates of the outage, hours down, type of outage (Scheduled or Forced), the reason for the outage, and the corrective action taken. This information covers the period being considered in this proceeding and is shown in Exhibit No. 2A. Staff compiled this data through review of Company documents, NRC documents, and interviews with Company personnel. The Company's Nuclear Units performed very well during the period January 1998 through December 1998. The Company's nuclear system incurred a 0.6% forced outage rate during this test period.

The Fossil Unit Outage Report is a listing of plants by unit, duration of outage (greater than 100 hours), reason for down time, and corrective action taken to return the plant to service. The information specifically reviewed for this proceeding is for the months of January 1998 through December 1998 and is included in Exhibit No. 2B. These Units' Availability Factors were in the 95 plus percentile for the greater portion of this period. The Company's base load fossil units achieved an equivalent availability of 86.5% for the period.

Staff reviewed and compiled a percentage Generation Mix statistic sheet for the Company's fossil, nuclear and hydraulic plants for January 1998 through December 1998. The fossil generation ranged from a high of 61% to a low 50%. The nuclear generation ranged from a high of 49% to a low of 38%. The percentage of generation by hydro ranged from a high of 3% to a low of 1%. This information is included in Exhibit No. 3. The Staff also collected and reviewed certain Generation Statistics of Major Plants for the 12 months ending December 31, 1998. This data is presented on Exhibit No. 4. This Exhibit shows the Company's major plants by name, type of fuel used, fuel cost in cents per kilowatt-hour to operate and total megawatt-hours generated for the period. The nuclear fueled Robinson Plant was lowest in cost at 0.46 cents per kilowatt-hour. The highest amount of generation of 13,869,428 megawatt-hours was produced at the Roxboro Station.

Utilities Department Exhibit No. 5 shows a comparison of the Company's original retail megawatt-hour (MWH) estimated sales to the actual sales for the period from January 1998 through December 1998. The original projections ranged from an under-estimate of 6.8% in June 1998 to an over-

estimate of 11.0% in November 1998 with a total over-estimate of 3.0% for the period.

Utilities Department Exhibit No. 6 shows a comparison of the Company's original fuel cost projections to the costs actually experienced for the months of January 1998 through December 1998. The original projections ranged from an over-estimate of 18.2% for July 1998 to an under-estimate of 14.7% for May 1998. The difference between actual and original projection of these fuel costs is further delineated graphically on Utilities Department Exhibit No. 7.

ON-SITE INSPECTION OF COMPANY'S COAL QUALITY SAMPLING TECHNIQUES

The Company's fuel sampling procedure for coal consists of identification of each train car by specific shipper, point of origin, and producer. A sample is taken from each car while unloading and is then crushed and placed in a sealed container. The sample is then sent to the laboratory and analyzed for moisture, ash, BTU, and sulfur content. The results of this testing are used to determine the actual price the Company will pay for the coal it received. The price could vary from the contracted price depending upon whether the quality of the coal, such as BTU content, is higher or lower than the level stipulated in the agreement. Staff has observed the Company's procedure for fuel sampling and has found this procedure to be adequate at this time.

REVIEW OF THE COMPANY'S CURRENTLY APPROVED RETAIL ADJUSTMENT FOR FUEL COSTS

Staff has reviewed the Company's currently approved Retail Adjustment for Fuel Costs Rider and found it to continue to operate properly and therefore Staff does not recommend any modifications at this time. Exhibit No. 8 is a copy of the Company's currently approved Adjustment for Fuel Costs Rider.

HISTORY OF THE CUMULATIVE RECOVERY ACCOUNT

Exhibit No. 9 is a history of the cumulative recovery account balances from inception in 1979 to December 1998.

CALCULATION OF BASE RATE FUEL COST COMPONENT FOR APRIL 1999 THROUGH MARCH 2000.

Utilizing the currently projected sales and fuel cost figures for the period April 1999 through March 2000 and including the projected under-recovery balance of $14,334,022 in the cumulative recovery account through December 1998 (See Accounting Exhibit G), the average fuel expense is estimated to be 1.368 cents per kilowatt-hour. Applying this fuel factor to the period would create an ending period estimated $3,953 under-collection in the cumulative recovery account.

The Commission has consistently expressed its expectation that the Company exercise all reasonable prudence and efficiency in its fuel purchasing practices and aggressively control the operation and maintenance of its production facilities to assure the lowest fuel costs possible. Also, the Commission has directed the Staff to monitor the Company's plant operations and fuel purchasing to insure that any inefficient or negligent practice is brought to the Commission's attention.

Exhibit No. 10 is a table of Projections of the Cumulative Recovery Account for various fuel base levels for the twelve month period ending March 2000. Also indicated in the table are the projected results using the current fuel factor base component and the Company's proposed factor of 1.122 cents/KWH.

CAROLINA POWER & LIGHT COMPANY
POWER PLANT PERFORMANCE DATA (%) REPORT

CAPACITY FACTOR	MW RATING	LIFE TIME	YEAR 1996	YEAR 1997	YEAR 1998	JAN 1998	FEB 1998	MAR 1998	APR 1998	MAY 1998	JUN 1998	JUL 1998	AUG 1998	SEP 1998	OCT 1998	NOV 1998	DEC 1998
BRUNSWICK 1	820	59.0	84.2	102.0	88.6	95.5	98.9	99.7	79.5	3.9	99.7	100.7	80.9	99.7	102.6	103.3	100.0
BRUNSWICK 2	811	57.0	78.3	91.8	98.0	101.5	101.8	101.4	101.8	99.8	83.6	100.8	82.1	100.7	98.2	102.7	102.1
HARRIS1	860	81.0	93.6	78.5	89.1	102.0	101.9	101.6	97.5	100.3	99.2	98.9	96.9	97.0	73.6	0.1	99.6
ROBINSON 2	683	68.9	91.0	102.2	92.0	107.1	107.0	19.5	44.6	105.3	101.6	101.0	102.4	104.0	98.9	106.8	107.3
TOTAL NUCLEAR	3174	64.8	86.9	91.7	91.9	101.3	102.2	83.4	82.6	76.3	95.8	100.3	90.2	100.1	92.8	75.9	102.0

5

AVAILABILITY FACTOR	MW RATING	JAN 1998	FEB 1998	MAR 1998	APR 1998	MAY 1998	JUN 1998	JUL 1998	AUG 1998	SEP 1998	OCT 1998	NOV 1998	DEC 1998
MAYO 1	745	86.5	100.0	83.6	61.6	99.7	100.0	100.0	100.0	100.0	100.0	100.0	99.0
ROXBORO 2	670	100.0	93.0	90.5	100.0	83.5	100.0	86.6	100.0	84.6	100.0	100.0	93.3
ROXBORO 3	707	100.0	94.2	97.0	96.6	91.3	100.0	100.0	99.6	59.4	0.0	0.0	52.1
ROXBORO 4	700	93.6	100.0	100.0	63.6	95.9	100.0	100.0	100.0	100.0	96.6	83.4	97.4
BRUNSWICK1	820	100.0	100.0	100.0	80.4	10.6	100.0	100.0	81.1	100.0	100.0	100.0	100.0
BRUNSWICK2	811	100.0	100.0	100.0	100.0	100.0	86.0	100.0	84.0	100.0	100.0	100.0	100.0
HARRIS 1	860	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.7	6.7	100.0
ROBINSON 2	683	100.0	100.0	19.3	48.9	100.0	100.0	100.0	100.0	100.0	94.7	100.0	100.0

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHBIT NO. 1

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT
January 1, 1998 – December 31,1998

NO.	DATE OFF	DATE ON	HOURS/TYPE*	REASON FOR OUTAGE AND CORRECTIVE ACTION
				BRUNSWICK UNIT 1
1.	04/25/98	05/28/98	806.42/S	Unit was taken off-line for scheduled refueling, planned maintenance and modifications.
2.	08/25/98	08/31/98	140.63/S	Unit was taken off-line per plant technical specifications in anticipation of Hurricane Bonnie.
				BRUNSWICK UNIT 2
1.	06/17/98	06/21/98	101.15/F	Unit taken out of service to replace failed drywell cooling fan motors.
2.	08/25/98	08/30/98	118.98/S	Unit was taken off-line per plant technical specifications in anticipation of Hurricane Bonnie.
				HARRIS UNIT 1
1.	10/23/98	11/28/98	867.93/S	The unit was taken out of service for planned refueling, periodic and preventative maintenance along with required testing and planned modifications.

TYPE* F – Forced S – Scheduled

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE 1 OF 1

CAROLINA POWER & LIGHT COMPANY
NUCLEAR UNIT OUTAGE REPORT
January 1, 1998 – December 31, 1998

NO.	DATE OFF	DATE ON	HOURS/TYPE*	REASON FOR OUTAGE AND CORRECTIVE ACTION
				ROBINSON UNIT 2
1.	03/06/98	04/14/98	930.15/S	The unit was taken out of service for a planned refueling, periodic and preventative maintenance along with required testing and planned modifications.
2.	04/25/98	04/27/98	38.12/F	Automatic reactor trip resulting from an inadvertent closure of the turbine governor valves due to a pressure spike. Failed pressure transmitter was replaced and equipment was recalibrated.
3.	10/17/98	10/18/98	39.33/F	Unit was forced off-line when a blown control fuse caused a turbine runback and led to an automatic trip on low steam generator levels during routine surveillance testing. Fuse blew due to a failed +25 VDC control power supply used during testing. Failed instrumentation was repaired, plant systems were reset and unit returned to service.

TYPE* F- Forced S- Scheduled

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2A
PAGE 2 OF 2

CAROLINA POWER & LIGHT COMPANY
FOSSIL UNIT OUTAGE REPORT
(100 HRS OR GREATER DURATION)
January 1, 1998 – December 31, 1998

MONTH	UNIT	HRS/TYPE*	REASON FOR OUTAGE AND CORRECTIVE ACTION
JAN 98	None		
FEB 98	None		
MAR 98	Mayo 1	389.03/S	The unit was taken off-line on March 26, 1998, for annual boiler inspection, periodic, preventative and corrective maintenance. Also adjustments were made due to high turbine vibration. Unit returned to service on April 12, 1998.
APR 98	Roxboro 4	261.62/S	Unit removed from service on April 11, for planned boiler inspection and overhaul. Outage was completed and unit returned to service on April 21, 1998.
MAY 98	Roxboro 2	123.03/S	Unit was removed from service on May 22 for scheduled boiler inspection and overhaul. Inspections included boiler and burner examinations. After maintenance activities the unit was returned to service on May 27, 1998.
JUN 98	None		
JUL 98	None		
AUG 98	None		
SEPT 98	Roxboro 2	110.82/S	Routine annual boiler inspection and maintenance from September 9 to September 14, 1998.

TYPE* F – Forced S - Scheduled

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2B
PAGE 1 OF 2

CAROLINA POWER & LIGHT COMPANY
FOSSIL UNIT OUTAGE REPORT
(100 HRS OR GREATER DURATION)
January 1, 1998 – December 31, 1998

MONTH	UNIT	HRS/TYPE*	REASON FOR OUTAGE AND CORRECTIVE ACTION
continued SEP 98	Roxboro 3	2114.17/S	The unit was taken off-line on September 18, for planned major 10 year overhaul and to perform periodic and preventative maintenance. Outage included turbine overhaul, partial water wall replacement for both boilers and low NOx burners were installed due to environmental requirements. After repairs the turbine was balanced and returned to service on December 12, 1998.
OCT 98	Roxboro 3		Outage continued
NOV 98	Roxboro 3		Outage continued
DEC 98	Roxboro 3		Outage continued

TYPE* F – Forced S - Scheduled

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 2B
PAGE 2 OF 2

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 3

CAROLINA POWER & LIGHT COMPANY

GENERATION MIX

JANUARY 1, 1998 - DECEMBER 31, 1998

1998 MONTH	FOSSIL %	NUCLEAR %	HYDRO %
JANUARY	52	46	2
FEBRUARY	50	47	3
MARCH	50	47	3
APRIL	52	45	3
MAY	60	38	2
JUNE	57	42	1
JULY	58	41	1
AUGUST	61	38	1
SEPTEMBER	54	45	1
OCTOBER	50	49	1
NOVEMBER	58	41	1
DECEMBER	50	49	1

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 4

CAROLINA POWER & LIGHT COMPANY

GENERATION STATISTICS OF MAJOR PLANTS

JANUARY 1, 1998 - DECEMBER 31, 1998

PLANT	TYPE FUEL	AVERAGE FUEL COST (CENTS/KWH*)	GENERATION (MWH)
Harris	Nuclear	0.48	5,626,307
Robinson 2	Nuclear	0.46	5,505,558
Brunswick 1	Nuclear	0.51	5,194,572
Brunswick 2	Nuclear	0.51	5,687,072
Robinson 1	Coal	1.54	913,258
Weatherspoon	Coal	1.92	658,368
Asheville	Coal	1.52	2,205,695
Roxboro	Coal	1.59	13,869,428
Sutton	Coal	1.90	2,768,082
Cape Fear	Coal	1.62	1,874,334
Mayo	Coal	1.71	3,602,970
Lee	Coal	1.74	1,683,777

(*) The average fuel costs for coal-fired plants include oil cost for start-up and flame stabilization.

CAROLINA POWER & LIGHT COMPANY

SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL ENERGY SALES FOR 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
[1] ESTIMATED SALES [MWH]	622,907	593,940	574,111	515,118	526,393	582,127	672,082	677,516	672,583	563,930	548,167	587,746	7,136,620
[2] ACTUAL SALES [MWH]	569,649	561,264	532,976	537,784	479,313	624,507	689,258	680,214	646,628	571,337	493,894	544,652	6,931,476
[3] AMOUNT DIFFERENCE [1]-[2]	53,258	32,676	41,135	-22,666	47,080	-42,380	-17,176	-2,698	25,955	-7,407	54,273	43,094	205,144
[4] PERCENT DIFFERENCE [3]/[2]	9.3%	5.8%	7.7%	-4.2%	9.8%	-6.8%	-2.5%	-0.4%	4.0%	-1.3%	11.0%	7.9%	3.0%

DOCKET NO.1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 5

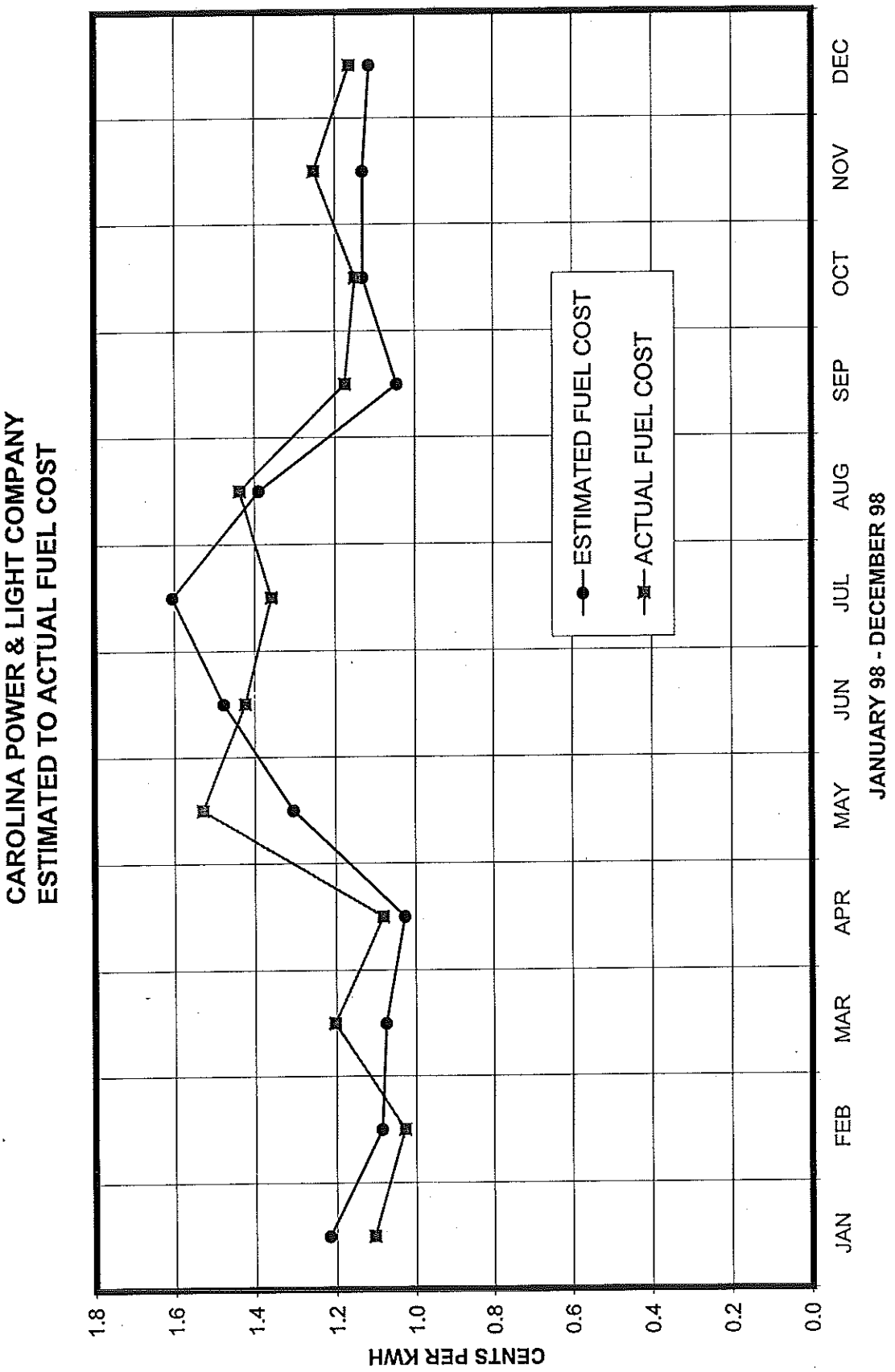
CAROLINA POWER & LIGHT COMPANY

SOUTH CAROLINA RETAIL COMPARISON OF ESTIMATED TO ACTUAL FUEL COST FOR 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
[1] ORIGINAL PROJECTION	1.217	1.086	1.075	1.027	1.305	1.478	1.605	1.390	1.045	1.131	1.131	1.115
[2] ACTUAL EXPERIENCE	1.105	1.028	1.203	1.082	1.530	1.425	1.358	1.438	1.176	1.150	1.253	1.165
[3] AMOUNT IN BASE	1.122	1.122	1.122	1.122	1.122	1.122	1.122	1.122	1.122	1.122	1.122	1.122
[4] VARIANCE FROM ACTUAL [1-2]/[2]	10.1%	5.6%	-10.6%	-5.1%	-14.7%	3.7%	18.2%	-3.3%	-11.1%	-1.7%	-9.7%	-4.3%

DOCKET NO.1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 6

DOCKET NO.1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 7



Carolina Power & Light Company
(South Carolina Only)

RIDER NO. 39Q
ADJUSTMENT FOR FUEL COSTS

APPLICABILITY

This adjustment is applicable to and is a part of the Utility's South Carolina retail electric rate schedules.

The Public Service Commission has determined that the costs of fuel in an amount to the nearest one-thousandth of a cent, as determined by the following formula, will be included in the base rates to the extent determined reasonable and proper by the Commission:

$$F = \frac{E}{S} + \frac{G}{S_1}$$

Where:

F = Fuel cost per kilowatt-hour included in base rate, rounded to the nearest one-thousandth of a cent.

E = Total projected system fuel costs:

(A) Fuel consumed in the Utility's own plants and the Utility's share of fuel consumed in jointly owned or leased plants. The cost of fossil fuel shall include no items other than those listed in Account 151 of the Commission's Uniform System of Accounts for Public Utilities and Licensees. The cost of nuclear fuel shall be that as shown in Account 518 excluding rental payments on leased nuclear fuel and except that, if Account 518 also contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from this account.

Plus

(B) Purchased power fuel costs such as those incurred in unit power and Limited Term power purchases where the fuel costs associated with energy purchased are identifiable and are identified in the billing statement.

Plus

(C) Interchange power fuel costs such as Short Term, Economy, and other where the energy is purchased on economic dispatch basis.

Energy receipts that do not involve money payments such as Diversity energy and payback of storage energy are not defined as purchased or interchange power relative to this fuel calculation.

Minus

(D) The cost of fuel recovered through intersystem sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.

Energy deliveries that do not involve billing transactions such as Diversity energy and payback of storage are not defined as sales relative to this fuel calculation.

S = Projected system kilowatt-hour sales excluding any intersystem sales.

G = Cumulative difference between jurisdictional fuel revenues billed and fuel expenses at the end of the month preceding the projected period utilized in E and S.

S_1 = Projected jurisdictional kilowatt-hour sales for the period covered by the fuel costs included in E.

The appropriate revenue-related tax factor is to be included in these calculations.

The fuel cost (F) as determined by Public Service Commission of South Carolina is 1.122 cents per kilowatt-hour, which shall remain in effect until superseded by a subsequent Commission order.

Supersedes Rider No. 39P

Effective for bills rendered on and after April 1, 1997

DOCKET NO. 1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 9

CAROLINA POWER & LIGHT COMPANY

HISTORY OF CUMULATIVE RECOVERY ACCOUNT

PERIOD ENDING	OVER (UNDER) $
March 1979 – Automatic Fuel Adjustment in Effect	
December 1979	1,104,730
September 1980	(12,000,131)
March 1981	(4,060,364)
August 1981	(12,113,832)
March 1982	(935,412)
September 1982	(6,881,796)
March 1983	(2,259,114)
September 1983	(3,264,694)
March 1984	109,270
September 1984	2,172,859
March 1985	(2,317,008)
September 1985	745,913
March 1986	1,972,280
September 1986	(696,805)
March 1987	2,408,354
September 1987	3,310,059
March 1988	(3,964,888)
September 1988	(5,737,541)
March 1989	(8,125,496)
September 1989	(5,875,641)
March 1990	(9,311,149)
September 1990	(658,614)
March 1991	1,403,023
September 1991	4,661,988
March 1992	5,201,112
September 1992	(6,712,920)
March 1993	(9,563,180)
September 1993	0*
March 1994	(1,010,684)
September 1994	1,975,939
March 1995	7,408,161
September 1995	2,011,489
December 1996	186,139
December 1997	(6,212,396)
December 1998	(14,334,022)

*Eliminated $14,011,263 per Commission Order No. 93-865

DOCKET NO.1999-001-E
UTILITIES DEPARTMENT
EXHIBIT NO. 10

CAROLINA POWER & LIGHT COMPANY

PROJECTIONS OF THE CUMULATIVE RECOVERY ACCOUNT FOR THE TWELVE MONTH PERIOD ENDING MARCH 2000

	FUEL BASE	PROJECTED CUMULATIVE OVER/(UNDER) RECOVERY ($)
	1.110	(18,938,338)
	1.120	(18,204,447)
COMPANY PROPOSED	1.122	(18,057,669)
	1.125	(17,837,502)
	1.150	(16,002,775)
	1.200	(12,333,320)
	1.250	(8,663,866)
	1.300	(4,994,411)
	1.302	(4,847,633)
	1.303	(4,774,244)
	1.325	(3,159,684)
	1.350	(1,324,957)
ZERO UNDER	1.368	(3,953)
ZERO OVER	1.369	69,436
	1.374	436,382
	1.375	509,771
	1.400	2,344,498
	1.500	9,683,407